Docket No. 13877/26501

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**
**BOARD OF PATENT APPEALS AND INTERFERENCES**

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| Inventor | : | Anna KRON et al. |
| Serial No. | : | 10/758,540 |
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| Examiner | : | Irina Sopjia Zemel |
| Art Unit | : | 1796 |

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Date: April 2, 2009

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## RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF

SIR:

In response to the Notification of Non-Compliant Appeal Brief mailed on March 2, 2009, Appellants submit the following amendment in this paper. The amendment is made here rather than in a new Appeal Brief because "[w]hen the Office holds the brief to be defective solely due to appellant's failure to provide a summary of the claimed subject matter as required by 37 C.F.R. § 41.37(c)(1)(v), an entire new brief need not, and should not, be filed." *See* MPEP § 1205.03.

**IN THE SUMMARY OF CLAIMED SUBJECT MATTER**

The Notification of Non-Compliant Appeal Brief alleges that Appellants' Brief is non-compliant with respect to 37 C.F.R. § 41.37(c)(1)(v). In response thereto, Appellants request that the following "Summary of Claimed Subject Matter," as required by 37 C.F.R. § 41.37(c)(1)(v), be entered as a replacement for the "Summary of Claimed Subject Matter" section as originally filed.

## 5. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 relates to a process for the production of expandable thermoplastic microspheres. *Specification*, page 2, lines 8-9. In addition, independent claim 2 relates to a process for eliminating or reducing residual monomers from expandable thermoplastic microspheres. *Id.*, page 2, lines 15-19. These microspheres have a thermoplastic polymer shell which encapsulates a propellant and are obtained by polymerizing ethylenically unsaturated monomers. These processes include the step of contacting these microspheres having a thermoplastic polymer shell which contains residual monomers with a chemical agent. *Id.*, page 2, lines 9-12. The chemical agent is selected from the groups consisting of oxo acids of sulfur, salts and derivatives thereof, comprising at least one sulfur atom having at least one free electron pair and binding three oxygen atoms. *Id.*, page 2, lines 12-14. These processes provide an efficient method of eliminating or reducing residual monomers from expandable thermoplastic microspheres without causing significant discoloration problems, providing expandable thermoplastic microspheres with both high brightness and low residual monomer content, without negatively affecting important properties of the microspheres, such as expandability. *Id.*, page 2, lines 4-7 and 36-38.

Independent claim 17 relates to expandable thermoplastic microspheres comprising a thermoplastic polymer shell, encapsulating a propellant. The thermoplastic polymer shell herein is obtained by polymerizing ethylenically unsaturated monomers and contains at least one non-polymeric reaction product and a chemical agent. *Id.*, page 7, lines 22-25. The chemical agent is selected from the

groups consisting of oxo acids of sulfur, salts and derivatives thereof, comprising at least one sulfur atom having at least one free electron pair and binding three oxygen atoms. *Id.*, page 7, lines 26-28. Further, independent claim 18 relates to expandable thermoplastic microspheres comprising a thermoplastic polymer shell, encapsulating a propellant. *Id.*, page 7, lines 29-32. The thermoplastic polymer shell herein is obtained by polymerizing ethylenically unsaturated monomers and contains at least one compound selected from the group consisting of salts and derivatives of a sulfonic acid anion as defined by either Formula I or Formula II. *Id.*, page 7, lines 29-37. Independent claim 20 relates to expandable thermoplastic microspheres comprising a thermoplastic polymer shell, encapsulating a propellant. *Id.*, page 9, lines 1-2. The thermoplastic polymer shell herein contains at least one non-polymeric reaction product and a chemical agent. The chemical agent is selected from the groups consisting of oxo acids of sulfur, salts and derivatives thereof, comprising at least one sulfur atom having at least one free electron pair and binding three oxygen atoms. *Id.*, page 7, lines 25-27. This thermoplastic polymer shell is made of a homo- or copolymer from ethylenically unsaturated monomers and the total amount of nitrile containing monomers in the polymer shell is at least 70% wt. *Id.*, page 9, lines 1-10. The microspheres contain less than 100 ppm residual nitrile containing monomers and have a brightness according to ISO 2470 of at least 75%. *Id.*, page 9, lines 4-7. The expandable thermoplastic microspheres of independent claims 17, 18, and 20 can be obtained by the processes according to independent claims 1 and 2 and have both high brightness and low residual monomer content, while important properties of such microspheres, for example expandability, are retained. *Id.*, page 7, lines 18-21.

## REMARKS

The substitute "Summary of Claimed Subject Matter" submitted herewith not only provides a "concise explanation of the subject matter defined in each of the independent claims" as required by 37 C.F.R. § 41.37(c)(1)(v), but also explicitly references each of the pending independent claims in response to the Notification of Non-Compliant Appeal Brief. Accordingly, Appellants respectfully submit that all requirements of 37 C.F.R. § 41.37 have been met, and that the Brief is in condition for consideration by the Examiner and the Board.

Respectfully submitted,
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Dated: April 2, 2009 By: _____
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